1-1-2002

Chiasmodontidae: Swallowers.

J. D. McEachran
Texas A&M University

Tracey Sutton
University of South Florida, tsutton1@nova.edu

Follow this and additional works at: https://nsuworks.nova.edu/occ_facreports

Part of the Marine Biology Commons, and the Oceanography and Atmospheric Sciences and Meteorology Commons

NSUWorks Citation

This Report is brought to you for free and open access by the Department of Marine and Environmental Sciences at NSUWorks. It has been accepted for inclusion in Marine & Environmental Sciences Faculty Reports by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.
Suborder TRACHINOIDEI
CHIASMODONTIDAE

Swallowers
by J.D. McEachran, Texas A & M University, USA and T. Sutton, University of South Florida, USA

Diagnostic characters: Small to moderate-sized (to about 26 cm total length). Body elongate and moderately compressed. Snout acute or rounded, longer than eye diameter; dorsal surface of head rugose and pitted by sensory pores; nostrils paired, anterior and posterior openings close set and pore-like; mouth terminal, large, and nearly horizontal; premaxilla and maxilla slender, non-protractile, firmly joined distally, and maxilla extending posterior to eye. Jaw teeth long and slender, arranged in 1 or 2 rows or in 3 to 5 bands. Teeth present in palatine and present or absent in vomer. Gill rakers absent or replaced by gill teeth fused to bony plates. Branchiostegal rays 6 or 7. Gill membranes separate and free of isthmus. Separate dorsal fins, first short with 7 or 8 flexible spines, second 0 or 1 flexible spine(s) and 18 to 29 segmented rays. Anal fin with 0 or 1 flexible spine and 17 to 29 soft rays; pectoral fins with 9 to 15 soft rays. Body naked (most adults), covered with small projecting spinules (most larvae or juveniles), or with 2 or more rows of stout, projecting prickles. Lateral line a series of distinct pores along side of body. Photophores present (Pseudoscopelus) or absent. Right and left sections of pelvic girdle separate from each other and free of pectoral girdles; total vertebrae 33 to 48. Gut very distensible and capable of holding large prey. Colour: uniformly dark brown to black.

Habitat, biology, and fisheries: Oceanic worldwide at mesopelagic and bathypelagic depths; juveniles at shallower depths; many species distributed in more than 1 ocean. Species of Kali have distinctive juvenile stage (gargaropteron) with relatively long snout, pectoral, and pelvic fins compared to adults. Adult food consists of ray-finned fishes that approach or exceed the size of the predator. Rarely taken in deep midwater trawls. Of no commercial importance.
Remarks: There are about 17 nominal species and a number of undescribed ones in 4 genera. No recent synopsis of the family is available, and the genera *Pseudoscopelus* and *Chiasmodon* require revision; some of the listed species of the former may be synonyms. Two of the genera were revised by Johnson and Cohen (1974).

Similar families occurring in the area
None, no other mesopelagic or bathypelagic fishes have separate doral fins containing true spines and rugose head.

List of species occurring in the area
Note: all sizes in standard length.

*Chiasmodon niger* Johnson, 1884. To 25 cm. Tropical and subtropical Atlantic, Pacific, and Indian Oceans.

*Chiasmodon subniger* Garman, 1899. To 49 cm. E and W Atlantic.

*Dysolotus alcocki* MacGillivray, 1905. To 22.5 cm. Tropical and subtropical Atlantic, Pacific, and Indian Oceans.

*Dysalotus oligoscolus* Johnson and Cohen, 1974. To 22.7 cm. Tropical and subtropical Atlantic, Pacific, and Indian Oceans.

*Kali indica* Lloyd, 1909. To 26.2 cm. Tropical and subtropical Atlantic, Pacific, and Indian Oceans.

*Kali macrodon* (Norman, 1929). To 26 cm. Tropical and subtropical Atlantic, Pacific, and Indian Oceans.


*Kali parri* Johnson and Cohen, 1974. To 22.2 cm. Tropical and subtropical Atlantic Ocean, questionable from area.

*Pseudoscopelus altipinnis* Parr, 1933. To 10.1 cm. Temperate to tropical, W Atlantic and W Pacific.

*Pseudoscopelus obtusifrons* (Fowler, 1934). To 11.5 cm. Tropical W Atlantic and W Pacific.

*Pseudoscopelus scriptus* Lütken, 1892. To 13.4 cm. Tropical Atlantic and W central Pacific Oceans.


References

